



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,962	10/24/2001	Matthew Heidner	1001.1479101	8725

28075 7590 11/14/2005

CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

EXAMINER

THALER, MICHAEL H

ART UNIT PAPER NUMBER

3731

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

e

Office Action Summary	Application No.	Applicant(s)	
	10/032,962	HEIDNER, MATTHEW	
	Examiner	Art Unit	
	Michael Thaler	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) 7,9,10,15 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,11-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3731

Claims 1-5, 8, 11-14 and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shoup et al. (5,591,129). Shoup et al. disclose balloon body 10 having an expandable region and a balloon waist (the portion of the balloon extending from reference numeral 19 to the right end of the balloon as seen in figure 12), the balloon waist having a plurality of voids 26, 27 wherein the plurality of voids are inherently configured such that the balloon waist will have a reduced profile over a substantial portion of the balloon waist subsequent to thermal reformation. In other words, if the balloon waist shown in figure 12 is subjected to thermal reformation, the melted balloon material would inherently flow into voids 26, 27 and reduce the profile of the waist. Note that the claims are drawn to a balloon waist with voids rather than a method of thermal reformation. Alternatively, it would have been obvious that thermal reformation would reduce the profile of the waist for the reasons set forth above. As to claim 4, the voids 26, 27 cause the material volume per unit length to decrease in the distal direction since the voids reduce the volume of the material. As to claim 5, Shoup et al. disclose proximal waist 18, 30 which includes a void above the tapered portion of 30 best seen in figure 8.

Applicant's arguments filed Sep. 28, 2005 have been fully considered but they are not persuasive. The claims are drawn to a balloon for a balloon dilatation catheter. Thus, only the balloon rather than the entire balloon dilatation catheter is claimed. The balloon 10 of Shoup et al., with no modification, is inherently capable of being disposed around an inner tubular member and an outer tubular member similar to the inner tubular member 22 and an outer tubular member 26 of applicant's invention such that the proximal end of the balloon is attached to the distal end of the outer tubular member and the distal end of the balloon is attached to the distal end of the inner tubular member. Further, the portion of the balloon extending from reference numeral 19 to the right end of the balloon as seen in figure 12, if subjected to thermal reformation, would melt and attach along its entire length to the underlying inner tubular member, thus functioning as a waist. In any event, in the embodiment of figures 1-6, the above identified portion of the balloon 10 is secured at 19 to an underlying tubular member 17 and also secured at terminus 29 to an underlying tubular member 13 (as indicated in col. 6, lines 6-8). Thus, the entire section between these two areas 19 and 29 may fairly be considered a waist. In any event, a waist, by definition, is an area of reduced diameter. The entire section between these two

Art Unit: 3731

areas 19 and 29 may fairly be considered a waist even if it is not secured to an underlying component along its entire length because this entire section is of a reduced diameter as compared with the central inflatable portion of the balloon. Further, applicant is requested to consider a hypothetical reference which discloses a balloon which is identical to the balloon of the invention, but which is secured to a shorter inner tubular member at its distal end such that distal end of the inner tubular member is located proximal to the voids (i.e. near the end of the lead line for reference numeral 32 in figure 5). According to applicant's line of reasoning, the portion containing the voids would not be properly considered to be a waist since this portion is not directly secured to the underlying inner tube and this hypothetical reference would not be applicable against the claims. However, this line of reasoning is clearly incorrect since the balloon of the hypothetical reference is identical to the balloon of the invention. Further, the balloon of the hypothetical reference is inherently capable of being secured to a longer inner tubular member such that the voids cover the inner tubular member and, when remelted, function as a waist. Similarly, the balloon of Shoup et al. is inherently capable of being secured to a inner

tubular member such that the voids cover the inner tubular member and, when remelted, function as a waist.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (571)272-4704. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571)272-4963. The fax phone number for the

Application/Control Number: 10/032,962

Page 6

Art Unit: 3731

organization where this application or proceeding is assigned is
(571)273-8300.

mht
11/4/05



MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731